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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,271	12/02/2003	Graham Davies	PH-2500	3391

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11/03/2006

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EXAMINER

KOEHLER, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/726,271	Applicant(s) DAVIES ET AL.	
	Examiner Christopher M. Koehler	Art Unit 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 11-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/2/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of group I, claims 1-10 in the interview summary filed on 9/14/2006 is acknowledged.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The term "special" in claims 6 and 7 is a relative term which renders the claim indefinite. The term "special" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergquist et al (US Patent No. 6,428,643) in view of Garnett (US Patent No. 3,843,977).

Claim 1:

Bergquist teaches a sanitaryware casting method comprising, providing at least one engine mold (figure 5) selected from a plurality of engine molds having a casting space for a unique performance engine configuration, providing at least one rim mold (figure 16) selected from a plurality of rim molds having a casting space for a unique rim configuration, separately casting the engine and rim in the selected configurations and assembling the rim with the engine to form at least one engine and rim assembly (figure 11) such that upon firing the engine and rim assembly forms a single integral piece of sanitaryware. Bergquist does not teach providing a shell mold for casting a shell into which the engine is disposed. Garnett teaches a sanitaryware assembly method comprising a molded shell (22), a molded engine (24) and a molded rim (50) which are assembled to each other to form a single piece of sanitaryware. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the three-piece (shell, engine and rim) sanitaryware assembly of Garnett to the sanitaryware casting method of Bergquist in order to provide a shell that surrounds the engine for aesthetic purposes. By incorporation of the Garnett teachings in Bergquist the resulting method is one in which the shell, engine and rim are separately cast and subsequently joined and fired resulting in a single integral piece of sanitaryware.

Claim 2:

Bergquist/Garnett teaches that the shell configuration includes a rim portion (22, figure 8 of Garnett) to accommodate placement of the rim (61) thereadjacent, a base portion (bottom of 22) for securement (73) to a support surface (floor) and a peripheral

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surface wall having an exterior surface that defines the shell's external contour and an interior surface that defines the shell housing space's internal contour and parameters.

Claims 3 and 4:

The examiner takes official notice that it is well known in the art of sanitaryware to glaze the exterior surface of an article to provide the desired color, contour, texture, etc. to the article for aesthetic purposes. It would have been obvious to one of ordinary skill in the art at the time of invention to glaze the exterior surface of the article for aesthetics and ease of cleaning the sanitaryware surface.

Claim 5:

Bergquist/Garnett teaches that the engine configuration includes a rim portion (24, figure 8 of Garnett) that is generally coplanar with the shell rim portion (figure 8), accommodates placement of the rim thereadjacent, a bowl portion (figure 7) having a complimentary contour relative to that of the peripheral surface wall (figure 3) and a trapway portion in communication with a fluid inlet and a fluid outlet contiguous therewith.

Claim 8:

Bergquist teaches a sanitaryware casting method comprising, selecting an engine mold (figure 5) from a plurality of engine molds having a casting space for a unique performance engine configuration, selecting a rim mold (figure 16) from a plurality of rim molds having a casting space for a unique rim configuration, separately casting the engine and rim in the selected configurations and assembling the rim with the engine to form at least one engine and rim assembly (figure 11) such that upon

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firing the engine and rim assembly forms a single integral piece of sanitaryware and repeating the process to make a plurality of sanitaryware articles. Bergquist does not teach providing a shell mold for casting a shell into which the engine is disposed.

Garnett teaches a sanitaryware assembly method comprising a molded shell (22), a molded engine (24) and a molded rim (50) which are assembled to each other to form a single piece of sanitaryware. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the three-piece (shell, engine and rim) sanitaryware assembly of Garnett to the sanitaryware casting method of Bergquist in order to provide a shell that surrounds the engine for aesthetic purposes. By incorporation of the Garnett teachings in Bergquist the resulting method is one in which the shell, engine and rim are separately cast and subsequently joined and fired resulting in a single integral piece of sanitaryware.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergquist/Garnett as applied to claim 8 above, and further in view of Applicant Admitted Prior Art (AAPA).

Claims 9 and 10:

Bergquist/Garnett teaches the structure of claim 8 above but does not explicitly teach the platform-manufacturing concept of claims 9 and 10. AAPA teaches that “integration of platforms in manufacturing strategies is well known in several industries for implementing common underlying structure as the basis for multiple, varying products” (page 6, lines 7-9). It would have been obvious to one of ordinary skill in the art at the time of invention to apply the platform-manufacturing techniques taught in

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AAPA to the sanitaryware casting process of Bergquist/Garnett since platforms enable manufacturers to market substantially similar products to different market segments while recovering research and development costs (AAPA, page 6, lines 15-17).

8. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergquist/Garnett as applied to claim 1 above, and further in view of Derror (US Patent No. 3,852,017).

Claims 6 and 7:

Bergquist/Garner teaches the structure of claim 1 above but does not explicitly teach the method of joining outside of "conventional methods". Derror teaches a process for manufacturing sanitaryware and states that one of the earliest method for making a toilet, and that still most frequently employed, involves casting the shell, the rim and the pipe separately and thereafter joining them by a thick slurry of liquid slip, often mixed with wheat germ, which is applied as a heavy bead along the joiner lines between the elements. It would have been obvious to one of ordinary skill in the art at the time of invention to apply the joining techniques taught in Derror as the "conventional method" taught by Bergquist/Garner in order to form a strong and seamless joint in the integral sanitaryware article.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Koehler whose telephone number is (571) 272-3560. The examiner can normally be reached on Mon.-Fri. 7:30A-4:00P.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CMK



DAVID P. BRYANT
SUPERVISORY PATENT EXAMINER

10/27/06